Name: Rachel Fischhoff Grade: 5 Date: April 2, 2012

TRIANGLES

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| Lesson Sources: Envision 8-4 |
| Lesson Objectives: Students will be able to classify triangles based on side length and angle measure. |
| Standards: |
| Multicultural Content: |
| Materials and Advanced Preparation: Triangles to sort, anchor chart to co-complete, Envision pages for students |
| Prior Knowledge and Skills Needed: Knowledge of angle categories |
| Key/New Vocabulary: |

Lesson Procedure: Part One

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| **Time** | **Teacher Actions** | **Student Learning Activities** | **Form of Assessment** |
| 1 min | **Warm Up**   * Mathematicians, last week we noticed how many angles we could see right here in our own classroom. What about triangles? Where do we see triangles in our room? In our lives? | Brainstorm | Recording ideas |
| 5 min | **1. Connection**   * Today we are going to continue our work with geometry and categorization by learning to sort triangles by examining their properties—things like side length and angles. * Let’s begin by taking a look at a variety of triangles and coming up with different ways to sort them with a partner * (Pass out triangles, give time to sort) * Share out a few sorts | Explain purpose of mini-lesson | Active listening |
| 10 min max | **2. The Teaching (The Giving of Information):**   * You have come up with some great ways to sort your triangle sets. Now I want to teach you about some of the ways mathematicians in the past have chosen to sort triangles. * First by side length—introduce side length categories * Also by angles—introduce angle categories * In discussion of angles, point out that *all triangles have angles that add up to 180 degrees* | * Active listening * Activating prior knowledge | * Active listening |
|  | **3. Have-A-Go (optional)**   * Take a look at your own triangle sets—which of these categories do your triangles fit into? * Invite students up to stick triangles to chart * Do any fit into more than one? | How will students be actively involved?  By:   * Practicing the mini-lesson | * Partners abilities to choose correct categories |
| **Anticipated Responses/Outcomes:**   * Some students may be able to access prior experience with triangle categories * For others, this will be brand new information | | | |
|  | **4. The Link**   * Mathematicians, today you will be working on problems that ask you to use what you know about triangles: their categories *and* the fact that their angles add up to 180. | **(Workshop Time)**   * Students will work on problem set from EnVision | * Confer with students—what knowledge is new? What’s working well? |
|  | **5. Closing (at the share)**   * Reaffirm triangle categories * Go over 180 rule * Exit ticket—draw iscosceles and obtuse triangles on notecard | * Process share | * Exit ticket |
| **Anticipated Responses/Outcomes:**   * I think the exit ticket could be tricky—to do and to time | | | |

**Reflections:**

How did the lesson plan work? What was effective? What did you learn? What would you change for tomorrow or the next time you will use this plan?